

REMARKS

Claims 1, 5, 7, 11-14, 18-20 and 24-26 are currently pending in this application. Claims 2-4, 6, 8-10, 15-17 and 21-23 have been cancelled and claims 1, 5, 7, 11-14, 18-20 and 24-26 have been amended. In view of the above amendments and following remarks, applicants respectfully submit that the application is in condition for allowance. Applicants therefore, respectfully request reexamination, reconsideration and allowance of the application.

The Examiner objected to the drawings because in FIGS 1 and 2 "pompig light" is used. Applicants have submitted currently herewith under separate cover a proposed amendment to the drawings with proposed changes in red. Applicants have amended FIGS. 1 and 2 to change "pompig light" to "pumping light" as suggested by the Examiner. Applicants therefore respectfully request that the proposed drawing amendment be entered and that this objection be withdrawn.

The Examiner objected to claims 4, 5, 10, 11, 13, 17, 18, 23, 24 and 26 as being dependent upon a rejected base claim but indicated the claims would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

Applicants have rewritten objected to claims 5, 11, 13, 18, 24 and 26 in independent form incorporating all the limitations of the corresponding base claims and any intervening claims. Applicants therefore respectfully request that the objection to claims 5, 11, 13, 18 24 and 26 be withdrawn.

Applicants have amended claim 1 to explicitly incorporate the limitations of allowable claim 4 and intervening claim 3. Applicants therefore respectfully submit that claim 1 is allowable.

Applicants have amended claim 7 to explicitly incorporate the limitations of allowable claim 10 and intervening claim 9. Applicants therefore respectfully submit that claim 7 is allowable as is claim 12 which depends on claim 7 and for additional limitations recited therein.

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Applicants have amended claim 14 to explicitly incorporate the limitations of allowable claim 17 and intervening claim 16. Applicants therefore respectfully submit that claim 14 is allowable as is claim 19 which depends on claim 14 and for additional limitations recited therein.

Applicants have amended claim 20 to explicitly incorporate the limitations of allowable claim 23 and intervening claim 22. Applicants therefore respectfully submit that claim 20 is allowable as is claim 25 which depends on claim 20 and for additional limitations recited therein.

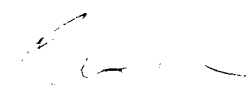
It is therefore respectfully submitted that pending claims 1, 5, 7, 11-14, 18-20 and 24-26 are in condition for allowance, and an early notice of allowance is respectfully requested.

Attached hereto is a marked-up version of the changes made to the above-identified application by the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A pumping light generator comprising:
two pumping light sources;
a combiner to combine pumping lights output from the two pumping light sources in orthogonal state of polarization; and
a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of the light output from the polarizing beam combiner, wherein the birefringent medium is disposed so as to output each input pumping light from each polarization axis of the birefringent medium at practically equal optical power to the other.

5. (Amended) [~~The pumping light generator of claim 1~~] A pumping light generator comprising:
two pumping light sources;
a combiner to combine pumping lights output from the two pumping light sources in orthogonal state of polarization; and
a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of the light output from the polarizing beam combiner, wherein the birefringent medium comprises polarization dispersion longer than a coherence length of the output light from each pumping light source.

7. (Amended) A pumping light generator comprising:
a plurality of pumping light sources;
a combiner to combine output lights from the plurality of pumping light sources; and
a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of the light output from the combiner wherein the birefringent medium is disposed so as to output each input pumping light from each polarization axis of the birefringent medium at practically equal optical power to the others.

11. (Amended) [~~The pumping light generator of claim 9~~] A pumping light generator comprising:

a plurality of pumping light sources;

a combiner to combine output lights from the plurality of pumping light sources; and

a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of the light output from the combiner, wherein the birefringent medium comprises polarization dispersion longer than a coherence length of the light output from each pumping light source.

12. (Amended) The pumping light generator of claim [9] 7 wherein the birefringent medium comprises either one of rutile crystal and YVO4.

13. (Amended) [~~The pumping light source of claim 7~~] A pumping light generator comprising:

a plurality of pumping light sources;

a combiner to combine output lights from the plurality of pumping light sources; and

a degree-of-polarization reducer to reduce the degree of polarization of the light output from the combiner, wherein the degree-of-polarization reducer comprises [the] first and [the] second birefringent mediums in which each polarization dispersion is longer than a coherence length of the output light from each pumping light, one polarization dispersion differs twice as much as the other one, and the second birefringent medium is arranged behind the first birefringent medium so that the light passed through the first birefringent medium is output from two polarization axes of the second birefringent medium at almost the equivalent optical power.

14. (Amended) A pumping light generator comprising:

a first pumping light source that produces a first pumping light;

a second pumping light source that produces a second pumping light;

a polarizing beam combiner to combine the first pumping light and the second pumping light in an orthogonal state of polarization; and

a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of light output from the polarizing beam combiner wherein the birefringent medium is disposed so as to cause optical power of the first pumping light to equal optical power of the second pumping light at the output of the birefringent medium.

18. (Amended) [~~The pumping light generator of claim 16~~] A pumping light generator comprising:

a first pumping light source that produces a first pumping light;

a second pumping light source that produces a second pumping light;

a polarizing beam combiner to combine the first pumping light and the second pumping light in an orthogonal state of polarization; and

a degree-of-polarization reducer comprising a birefringent medium to reduce the degree of polarization of light output from the polarizing beam combiner, wherein the birefringent medium comprises polarization dispersion longer than a coherence length of either the first pumping light or the second pumping light.

19. (Amended) The pumping light generator of claim [16] 14 wherein the birefringent medium is selected from the group consisting of rutile crystal and YVO4.

20. (Amended) A pumping light generator comprising:
a plurality of pumping light sources that produce a plurality of pumping lights;
a combiner to combine the pumping lights and produce a light output; and
a degree-of-polarization reducer comprising a birefringent medium to reduce a degree of polarization of the light output from the combiner, wherein the birefringent medium is disposed so as to cause optical power of each pumping light which is output from the birefringent medium to be essentially equal in optical power.

24. (Amended) [~~The pumping light generator of claim 22~~] A pumping light generator comprising:
a plurality of pumping light sources that produce a plurality of pumping lights;
a combiner to combine the pumping lights and produce a light output; and
a degree-of-polarization reducer comprising a birefringent medium to reduce a degree of polarization of the light output from the combiner, wherein the birefringent medium comprises polarization dispersion longer than a coherence length of any of the pumping lights.

25. (Amended) The pumping light generator of claim [22] 20 wherein the birefringent medium is selected from the group consisting of rutile crystal and YVO4.

26. (Amended) [~~The pumping light source of claim 20~~] A pumping light generator comprising:
a plurality of pumping light sources that produce a plurality of pumping lights;

a combiner to combine the pumping lights and produce a light output; and

a degree-of-polarization reducer to reduce a degree of polarization of the light output from the combiner, wherein the degree-of-polarization reducer comprises first and second birefringent mediums each having a polarization dispersion length longer than a coherence length of any of the pumping lights, one of the polarization dispersion lengths being twice as much as the other one, and the second birefringent medium is arranged to receive light passed through the first birefringent medium, and further arranged so that the input to the two polarization axes of the second birefringent medium contribute essentially equivalent optical power to light output from the second birefringent medium.

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